

REMARKS

Claims 1-6 and 24-39 are canceled, claim 7 is amended; new claims 40 and 41 are added; and claims 7-23, 40 and 41 are pending in the application.

Claims 7-23 stand rejected is being unpatentable over Lam (EPO Document Number 1 041 170 A2). Applicant respectfully requests reconsideration of such rejections.

Amended claim 7 recites a nickel/vanadium sputtering component structure which comprises at least 99.99 weight percent, excluding gases, nickel and vanadium; and which has an average grain size throughout the structure of less than or equal to 40 microns (μm). The amendment to claim 7 removes the term "about" from the claim, so that the claim now recites an average grain size less than or equal to 40 microns; rather than less than or equal to *about 40 microns*. Such amendment is believed to clarify a distinction between claim 7 and the cited reference of Lam.

Lam discloses sputtering components containing nickel/vanadium, but does not suggest or disclose that such components have an average grain size of less than or equal to 40 μm . Instead, Lam specifically states that the sputtering components formed by the procedures described therein have grain sizes of 47 μm or larger (see, Lam's paragraph 0020).

In spite of Lam's specific teaching that the procedures disclosed therein form components having grain sizes of 47 μm or larger, the Examiner contends that Lam's sputtering components would be expected to possess all the same properties as recited in

the instant claims, including the purity and crystal grain size (page 5 of the Office Action, emphasis added by the Examiner). The Examiner argues that Lam's materials and methods are similar to, if not the same as, applicant's disclosed methods, and thus contends that Lam's sputtering target is expected to possess the same properties as recited in applicant's claims.

Applicant respectfully submits that Lam's disclosed process is not the same as that described by applicant. Specifically, applicant states at paragraph 0029, and again in the Example at paragraph 0034, that a series of hot-rolling steps and cold-rolling steps utilized during thermo-mechanical to impart a desired grain size are uni-directional, and all utilize rolling along the same direction as one another. In contrast, Lam specifically states that the hot-rolling and cold-rolling described therein are applied with cross-rolling to maintain a desired circular shape of a workpiece during the rolling (see, Lam's paragraphs 0012 and 0013).

It is generally known in the art that it can become increasingly difficult to obtain fine grain sizes with increasing purity of materials, and specifically that it is quite difficult to obtain ultra-fine grain sizes with nickel/vanadium compositions having very high purity. Thus, it would not be expected that the process that Lam states forms high purity materials with grain sizes of at least 47 μ m can be readily utilized to form the claim 7 recited high-purity materials having an average grain size of less than 40 μ m. The process of Lam is different from that utilized by applicant, and the differences lead to improvements in the materials formed by applicant's method relative to the materials disclosed by Lam

(specifically, the differences lead to smaller grain sizes being produced by applicant's method).

Since the claims of the present invention are product claims, applicant should not be required to recite specific process steps in order to obtain allowance of the claims. Rather, the claims should be allowed on the basis that the prior art does not disclose or suggest formation of the recited constructions having high purity of nickel/vanadium and also having grain sizes less than 40 μ m. Applicant has added product-by-process claims 40 and 41 to the application, however, to show that the invention can also include the product of claim 7 formed by specific processes.

Claim 7 is allowable for the reasons discussed above, and the remaining claims 8-23, 40 and 41 depend from claim 7, and are therefore allowable for least the reasons discussed above regarding claim 7, as well as for their own recited features which are neither shown or suggested by the prior art. Applicant therefore respectfully requests that the Examiner's next action be a Notice of Allowance formally allowing all of the pending claims. If the Examiner's next action is to be anything other than a Notice of Allowance, applicant requests that the Examiner please call the undersigned (telephone number 509-624-4276) prior to issuance of the next action to arrange a telephone interview.

Respectfully submitted,

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By: 

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